

## METHOD AND SYSTEM FOR TAKING A DATA SNAPSHOT

### ABSTRACT OF THE DISCLOSURE

A method and system for creating a snapshot of data. The snapshot system creates a snapshot of data that is hierarchically organized, such as the data of a file system. When a snapshot is to be created, the snapshot system copies the root node of the hierarchical organization to a new root node that points to the same child nodes as the copied root node. This new root node becomes the root node of the snapshot data. When a current node is subsequently modified, the snapshot system replaces each ancestor node of that node that has not yet been replaced with a new node that has the same child nodes as the replaced node. The snapshot system also replaces the node to be modified with a new node that points to the same child nodes of the replaced node.